

CLAIMS

1. An air purifier comprising a discharge electrode capable of producing ions upon discharge, a counter electrode located opposite to the discharge electrode, and a power supply capable of applying voltage between the discharge electrode and the counter electrode for inducing discharge for producing ions at the discharge electrode,

the counter electrode comprising a gas absorbent material comprising: a high-temperature carbonized charcoal which has been carbonized at a temperature of about 800°C or above; a low-temperature carbonized charcoal which has been carbonized at a temperature of about 500°C or below; and alginic acid or its salt or calcium oxide.

2. The air purifier according to claim 1, wherein the discharge on the discharge electrode is corona discharge.

3. The air purifier according to claim 1 or 2, wherein the gas absorbent material comprises both alginic acid or its salt and calcium oxide.

4. The air purifier according to any one of claims 1 to 3, wherein the mixing ratio of the high-temperature carbonized charcoal to the low-temperature carbonized charcoal in the gas absorbent material is 30 : 70 to 60 : 40 on a weight basis.

5. The air purifier according to any one of claims 1 to 4, wherein the high-temperature carbonized charcoal is produced by carbonization at a temperature of 800 to 1300°C.

6. The air purifier according to any one of claims 1 to 5, wherein the low-temperature carbonized charcoal is produced by carbonization at a temperature of 300 to 550°C.

7. The air purifier according to any one of claims 1 to 6,

wherein the gas absorbent material functions also as an indoor construction material.